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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,065	06/25/2002	Jorg Kagi	1647/7	9286

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EXAMINER	
HURLEY, SHAUN R	

ART UNIT	PAPER NUMBER
3765	11

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/030,065	KAGI, JORG	
	Examiner	Art Unit	
	Shaun R Hurley	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-22,24-31 and 33-37* is/are rejected.

7)☒ Claim(s) *23 and 32* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 15-22, 24-31, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanai (4677817) in view of Panasiuk et al (5228929).

Kanai teaches a polished, treated steel traveler for use on a ring spinning, the traveler being treated so as to provide increased wear resistance on its contact surfaces (Abstract; Figures 1, 4, 5, and 8). Panasiuk teaches us that it is well known to treat steel machinery components by subjecting them to an oxidizing treatment followed by a nitriding treatment (Abstract; Figures 2, 3) comprising heating the steel to 450 - 600° C for 3 - 60 hours (Column 3, lines 36-43) while supplying a nitriding agent in the form of a gas comprising NH_3 and N_2 components, a nitrogen-enriched liquid, or a nitrogen-enriched plasma, components of sulfur and carbon (Column 2, lines 9-25), all of which provides for a steel component having connecting layer of thickness 0.1 - 30 μm and a diffusion layer of thickness 1 - 2000 μm (Column 2, lines 24-25; Column 3, lines 45-50; Column 4, lines 46-48). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize the steel machinery component treatment of Panasiuk, which increases wear resistance, on the steel ring spinning machine traveler of Kanai, so as to provide resistance to wear. Treating steel travelers for wear resistance is well known, and many methods exist to do so. The ordinarily skilled artisan would understand that a traveler

would need to be treated, and would know what treatments could be used, including those which provide wear resistance to steel machine components.

In reference to a surface color of black, blue, yellow, or white, Applicant has failed to adequately describe or disclose why such a requirement is considered new and inventive. As such, Examiner holds that such a limitation is obvious and the ordinarily skilled artisan would know what color the surface should be. Examiner notes that the reaction of steel in a nitriding treatment will in fact provide such colors and therefore is inherent of the method.

In reference to polishing the traveler before or after the nitriding treatment, while polishing after production is taught, both would be well known. Travelers MUST be smooth, they are subject to constant surface-to-surface contact, and a rough traveler would fail quickly, as well as destroy any yarn guided. As such, the ordinarily skilled artisan would understand to polish the traveler before and/or after treatment, so as to ensure a vitally smooth surface.

In reference to the core containing chromium, vanadium, aluminum, molybdenum, manganese, or nickel, this is inherent of steel, as well as containing iron.

Response to Arguments

3. Applicant's arguments filed 16 January 2004 have been fully considered but they are not persuasive. Applicant has two basic arguments; the combination of Kanai in view of Panasiuk, and pre-polishing of a traveler.

In regards to Applicant's arguments against the combination of Kanai in view of Panasiuk, Applicant argues that Kanai teaches a ceramic layer, which is different from his nitriding superficial layer. Applicant further argues that Panasiuk teaches the superficial layer, including the process for applying such, but that it's porous and unfit for use as a traveler

treatment. What Applicant hasn't argued, however, is what the combination as presented to him by Examiner teaches or lacks thereof. In fact, the combination as presented by Examiner is such. Kanai teaches that it is well known to treat travelers. Travelers must be smooth, this is one of the most basic concepts of traveler structure. While Kanai teaches a ceramic coating, many other coatings are well known in the art. One such coating is taught by Panasiuk. While Panasiuk does not specifically teach treating a traveler, he does specifically teach treating the identical material Kanai teaches, so as to provide a wear resistant coating. While Panasiuk may not specifically teach a smooth surface, he was never relied upon to do so. Kanai specifically teaches that travelers which have been coated are polished, providing the teaching of a smooth traveler. Not only would the ordinarily skilled artisan understand how to apply the treatment of Panasiuk to the traveler of Kanai, but also he would most certainly understand how and when to polish that subsequent traveler.

In regards to Applicant's argument against Examiner's statement that polishing a traveler prior to treatment, Examiner presents the following comments. Applicant states, "While it is true that travelers must be smooth due to constant surface-to surface contact, it would not be obvious to one of ordinary skill in the art to polish the traveler before treatment". Applicant further states, "The act of polishing the core before the nitriding treatment is **a distinct and unobvious departure from the existing practice** of polishing only after treatment" [emphasis added by Examiner]. This is wrong. As explained in the previous Office Action, polishing both before and after traveler treatments is well known and well documented. As to honor Applicant's request for documentation of such, Examiner presents Foard (2970425). Foard specifically teaches polishing a ring before and after treatment. The ordinarily skilled artisan understands the

relationship between a ring and traveler, understands the teaching of smoothness between the two, and would understand to apply the same to the opposing sliding component, namely the traveler. Prior and subsequent polishing of ring spinning components is well known and well documented.

Rather than address the combination as detailed in the prior office action, Applicant has argued selected sections of each component piece of prior art, and as a result his arguments are flawed. The combination as detailed above clearly sets forth a *prima facie* case of obviousness.

Allowable Subject Matter

4. Claims 23 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R Hurley whose telephone number is (703) 605-1236. The examiner can normally be reached on Mon - Fri, 6:30am - 3:00pm, off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J Calvert can be reached on (703) 305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SRH
27 February 2004

JOHN J. CALVERT
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TECHNOLOGY CENTER 3700